CLAIMS:

1. A solid electrolytic capacitor comprising:

at least one solid electrolytic capacitor component comprising a foil-like valve metal substrate formed with an insulating oxide film on the surface thereof;

at least one lead electrode pair including an anode lead electrode and a cathode lead electrode which are provided on at least one end portion region of the foil-like valve metal substrate;

and a cathode electrode formed by sequentially forming at least a solid high molecular polymer electrolyte layer and a conductive layer on the foil-like valve metal substrate;

the anode lead electrode comprising a valve metal body whose one end portion region is bonded to the at least one end portion region of the foil-like valve metal substrate so that electrical connection can be established between the valve metals and a first conductive metal substrate whose one end portion region is bonded to the other end portion region of the foil-like valve metal substrate so that electrical connection can be established between the metals;

the cathode lead electrode being formed by drawing out a part of a second conductive metal substrate connected to one surface of the conductive layer formed on the foil-like valve metal substrate in a direction parallel to the anode lead electrode.

2. A solid electrolytic capacitor in accordance with Claim 1 wherein at least one lead electrode pair is provided at each of opposite end portion regions of the foil-like valve metal substrate.

3. A solid electrolytic capacitor in accordance with Claim 1 wherein

at least one lead electrode pair is provided at each of four end portion regions of the foil-like valve metal substrate.

4. A solid electrolytic capacitor in accordance with any one of Claims 1 to 3 wherein a plurality lead electrode pairs are provided so that the anode lead electrodes and the cathode lead electrodes thereof are alternately disposed.

5. A solid electrolytic capacitor in accordance with any one of Claims 1 to 4 wherein a plurality of lead electrode pairs are disposed at positions symmetric with respect to each other around a center of gravity of the solid electrolyte capacitor.

6. A solid electrolytic capacitor in accordance with any one of Claims 1 to 5 wherein two or more solid electrolyte capacitor components are layered so that the anode lead electrodes and the cathode lead electrodes are directed in the same direction.

7. A method for manufacturing a solid electrolytic capacitor comprising steps of:

bonding one end portion region of a valve metal body to at least one end portion region of a foil-like valve metal substrate formed with an isolating oxide film, thereby fabricating an electrode body for a solid electrolyte capacitor component;

masking the electrode body so that a part of the valve metal body cannot be subjected to anodic oxidization;

dipping the electrode body in a forming solution so that the whole of the foil-like valve metal substrate, the whole portion subjected to

masking processing and a part of the valve metal body which has not been subjected to the masking processing are immersed therein, applying voltage to the electrode body to effect anodic oxidization thereon and form an insulating oxide film at least at an edge portion of the foil-like valve metal substrate;

forming a solid high molecular polymer electrolyte layer on the substantially entire surface of the foil-like valve metal substrate;

coating the solid high molecular polymer electrolyte layer with a conductive paste and drying the conductive paste to form a conductive layer, removing the mask from the valve metal body;

mounting at least one solid electrolytic capacitor component thus fabricated on a lead frame, bonding one end portion region of an anode lead portion of the lead frame to the other end portion region of a valve metal body whose surface is not roughened, thereby forming an anode lead electrode, and connecting a cathode lead portion of the lead frame to the conductive layer, thereby forming a cathode lead electrode so as to be drawn out from the conductive layer in a direction parallel to the anode lead electrode.